

# Audit



# Report

OFFICE OF THE INSPECTOR GENERAL

**ENVIRONMENTAL CONSEQUENCE ANALYSES FOR THE  
V-22 OSPREY PROGRAM**

Report No. 93-077

March 29, 1993

20000508 095

**Department of Defense**

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## **Acronyms**

EA  
EIS  
FONSI  
IPS  
NEPA  
PEA  
ROD

Environmental Assessment  
Environmental Impact Statement  
Finding of No Significant Impact  
Integrated Program Summary  
National Environmental Policy Act  
Programmatic Environmental Analysis  
Record of Decision



**INSPECTOR GENERAL**  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2884



March 29, 1993

**MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION**

**SUBJECT:** Audit Report on the Environmental Consequence Analyses for the V-22  
Osprey Program (Report No. 93-077)

We are providing this report for your information and use. This report resulted from our audit of the Effectiveness of DoD Environmental Consequence Analyses of Major Defense Acquisition Programs. We considered comments to a draft of this report in preparing the final report. Management concurred with our audit recommendation; therefore, comments on this final report are not required.

We appreciate the courtesies extended to the audit staff. If you have any questions on this report, please contact Mr. Russell A. Rau, Program Director, at (703) 693-0186 (DSN 223-0186) or Mr. Jack D. Snider, Project Manager, at (703) 693-0402 (DSN 223-0402). Appendix C lists the distribution of this report.

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

Enclosure

cc:  
Secretary of the Navy  
Commandant of the Marine Corps

**Office of the Inspector General, DoD**

Report No. 93-077  
(Project No. 2AE-0048.01)

March 29, 1993

**ENVIRONMENTAL CONSEQUENCE ANALYSES FOR THE V-22 OSPREY  
PROGRAM**

**EXECUTIVE SUMMARY**

**Introduction.** The Navy's V-22 Osprey is a tilt rotor, vertical takeoff and landing aircraft for Joint Service application. The aircraft is designed to meet amphibious and vertical assault, strike and rescue, and special operations needs of the Marine Corps, Navy, and Air Force, respectively. In May 1986, the Deputy Secretary of Defense authorized the Navy to enter Engineering and Manufacturing Development of the V-22 Osprey Program. In April 1989, the Secretary of Defense terminated all V-22 production. However, Congress appropriated funding for the Program from FYs 1990 through 1992. As of March 1993, DoD has not made a decision to continue the Engineering and Manufacturing Development of the Program.

**Objectives.** The audit objectives were to evaluate the effectiveness of DoD environmental consequence analyses of major Defense acquisition programs and to assess compliance with provisions of the National Environmental Policy Act of 1969 and internal controls related to the objectives. The V-22 Osprey was one program in the audit of the Effectiveness of DoD Environmental Consequence Analyses of Major Defense Acquisition Programs.

**Audit Results.** The Navy did not assess the environmental consequences, prepare and process environmental documents, and integrate environmental considerations into its decisionmaking process for the V-22 Osprey Program. As a result, the Navy cannot be assured that it is carrying out its mission in a manner consistent with statutory and regulatory environmental policies and procedures.

**Internal Controls.** The audit identified a material internal control weakness in that controls were not effective to ensure assessment of the environmental consequences of the V-22 Osprey Program. Part I of the report discusses this internal control weakness.

**Potential Benefits of Audit.** Potential benefits are not monetary. Implementation of the recommendation will ensure compliance with environmental policies and provide assurance that the V-22 Osprey Program will not incur costly delays and additional expenditures resulting from noncompliance with environmental policies (Appendix A).

**Summary of Recommendation.** We recommended that the Under Secretary of Defense for Acquisition direct the Navy to:

- o Conduct and document a programmatic environmental analysis of the V-22 Osprey Program for Defense Acquisition Executive approval before the Program reenters Engineering and Manufacturing Development;

- o Provide a summary of required environmental impact statements to the Defense Acquisition Executive for decision before any low-rate initial production is authorized; and

o Incorporate the results of environmental analyses and impact statements, including impacts identified and mitigating actions to be taken, into the Integrated Program Summary, life-cycle cost estimates, and other Defense Acquisition Board documentation for review at the low-rate initial production decision.

**Management Comments.** We received comments to a draft of this report from the Principal Deputy Assistant Secretary of Defense (Production and Logistics) (the Principal Deputy); and the Director, Land Forces Division, Office of the Assistant Secretary of Defense (Program Analysis and Evaluation) (the Director). The Principal Deputy concurred with the finding and suggested additional wording for the recommendation. The Director concurred with the recommendation and made two additional comments concerning Engineering and Manufacturing Development of the V-22 Osprey Program and including results of environmental analyses and impact statements into life-cycle cost estimates. The complete text of the Principal Deputy's and the Director's comments are in Part IV. We do not require comments to the final report because management concurred with the recommendation.

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The Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report. Copies of the report can be obtained from the Information Officer, Audit Planning and Technical Support Directorate (703) 614-6303 (DSN 224-6303).

## **Part I - Introduction**

## Introduction

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## Background

The Navy's V-22 Osprey is a tilt rotor, vertical takeoff and landing aircraft for Joint Service application. The aircraft is being developed to perform various combat missions, including medium-lift assault for the Marine Corps, combat search and rescue for the Navy, and long-range special operations for the Air Force. The V-22 Osprey is intended to replace selected helicopters in the Navy and Marine Corps and will supplement existing Air Force helicopters and aircraft.

The V-22 Osprey Program entered its Demonstration and Validation phase and Engineering and Manufacturing Development phase in December 1982 and April 1986, respectively. In May 1986, the Navy awarded a fixed-price incentive contract to the team of Bell Helicopter Textron, Inc., and Boeing Helicopter Company to design and produce six aircraft for flight testing; three of the six aircraft will be used for ground testing. The contract target price and ceiling price were \$1.7 billion and \$1.8 billion, respectively. The contract also included an option to buy 12 aircraft under pilot production. As of September 1992, five of the six flight test aircraft have been manufactured; however, two have crashed and were totaled. In addition to the Engineering and Manufacturing contract, the Navy awarded, in May 1986, a firm-fixed price contract to Allison Gas Turbine Division of General Motors Corporation for 21 engines. As of May 1992, this contract was valued at \$141.7 million.

In an amended FY 1990 budget submission, the Secretary of Defense deleted the V-22 Osprey Program and instead requested funding for a new medium-lift replacement alternative. Congress denied that request and has continued to fund the V-22 Osprey Program.

On January 17, 1992, the Defense Acquisition Board conducted a program review to consider proposed alternatives for continued development of the Program. The Under Secretary of Defense for Acquisition postponed a decision on the Program and issued a memorandum on January 21, 1992, to the Navy Acquisition Executive to request additional program information. On February 28, 1992, the Navy responded by providing details on contractor performance, additional requirements to meet the specified operational need, and estimated costs to fund the additional requirements. The Defense Acquisition Board held a Milestone 0, Concept Studies Approval, Review of the Marine Corps' Medium-Lift Replacement in late FY 1992. The V-22 is one alternative to be considered in meeting that requirement. As of March 1993, DoD has not made a final decision to continue the Engineering and Manufacturing Development of the Program.



### Objectives

The overall audit objective was to evaluate the effectiveness of DoD environmental consequence analyses of major Defense acquisition programs. The audit also assessed compliance with provisions of the National Environmental Policy Act (NEPA) of 1969 and internal controls related to the objective. The V-22 Osprey was one program reviewed during this audit. During the audit survey, we determined that the V-22 Program had been tentatively approved to reenter the Engineering and Manufacturing Development phase with the possibility of entering a production and deployment phase soon, thereby making the Program's compliance with environmental policies even more critical. We are reporting this issue separately because action is needed on the identified issue before the conclusion of our overall audit work.

### Scope

We conducted this program audit of the V-22 Osprey from July through October 1992 and reviewed records dated from 1981 through 1992 relative to the V-22 Osprey Program. We also discussed the issues related to environmental policy and acquisition strategy with Government personnel involved in the acquisition of the Program. The audit was made in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD, and accordingly included such tests of internal controls as were deemed necessary. Appendix B lists the activities visited or contacted.

### Internal Controls

The audit identified material internal control weaknesses as defined by Public Law 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. The management oversight and program controls were not effective to ensure an adequate assessment of the environmental consequences associated with the V-22 Osprey Program. Our recommendation, if fully implemented, will correct this situation. Copies of the final report will be provided to the senior officials responsible for internal controls within the Office of the Secretary of Defense and the Navy and Marine Corps.

## **Introduction**

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### **Prior Audits and Other Reviews**

Since 1987, the General Accounting Office; the IG, DoD; the IG, Air Force; and the Naval Air Engineering Center, Lakehurst, New Jersey, have issued 16, 3, 1, and 1 reports, respectively, that included the V-22 Osprey Program. However, we did not follow up on the prior audit reports because they did not contain findings or recommendations related to our objective.

## **Part II - Finding and Recommendation**

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## Environmental Analysis

The Navy did not assess the environmental consequences, prepare and process environmental documents, and integrate environmental considerations into its decisionmaking process for the V-22 Osprey Program. This failure to consider the Program's environmental impact occurred because of inadequate program oversight and lack of familiarity with environmental laws and DoD environmental policies. As a result, the V-22 Osprey Program Office cannot be assured that it is carrying out its mission in a manner consistent with national environmental policies. Additionally, the Program could be subjected to costly delays in development and manufacturing as a result of noncompliance with environmental laws.

## Background

**National Environmental Policy Act.** The DoD must ensure, to the maximum extent possible, that it is accomplishing its mission in a manner consistent with national environmental laws and DoD policies. The NEPA is the national charter for protection of the environment. It establishes policy, sets goals, provides a means for carrying out the policy, and contains provisions to make sure that Federal Agencies comply. The NEPA requires DoD to integrate the NEPA process with other planning as early as possible to ensure that planning and decisions reflect environmental values, to avoid delays in the process, and to prevent conflicts. The DoD shall review its policies, procedures, and regulations and revise them as necessary to ensure full compliance with the provisions of the NEPA. The NEPA created the Council on Environmental Quality. The Council's authority is derived from the Environmental Quality Improvement Act of 1970 and Executive Order 11514, "Protection and Enhancement of Environmental Quality," March 5, 1970. The Council reviews and evaluates the programs and activities of the Federal Government to determine how they are contributing to the attainment of the national environmental policy, develops and recommends to the President policies to improve the environmental quality of the Nation, and issues environmental policies and procedures.

**DoD Directive 6050.1.** DoD Directive 6050.1, "Environmental Effects in the United States of DoD Actions," July 30, 1979, implements the Council on Environmental Quality regulations and provides policy and procedures for DoD officials to consider environmental consequences before approving major DoD actions. Enclosure 1 to the Directive discusses planning considerations, environmental assessments (EAs), preimplementation actions, and public involvement.

**Planning Considerations.** DoD Directive 6050.1 requires DoD Components to integrate the NEPA into the initial planning stages of proposed DoD actions to ensure that environmental impacts are properly addressed and to

avoid unnecessary costs or delays in the acquisition, fielding, and disposal process. In the planning process, DoD Components will determine, as early as possible, whether to prepare environmental impact statements (EISs) based on the overall programmatic environmental analysis (PEA), required by DoD Instruction 5000.2, "Defense Acquisition Management Policies and Procedures," February 23, 1991, part 6, section I, or to prepare individual EAs in support of the PEA. An EIS provides full disclosure of significant environmental implications of the assessed program, informs decisionmakers and the public of the alternatives considered and mitigating environmental measures being implemented on the selected alternative, and serves to ensure that the policies and goals defined in the NEPA are incorporated into the assessed program and the decisionmaking process.

**Environmental Assessment.** The DoD Component uses an EA to determine whether the preparation of an EIS or a finding of no significant impact (FONSI) is required, to comply with the NEPA when an EIS is not necessary, and to facilitate preparation of an EIS when an EIS is required. The DoD Component should prepare an EA as early as possible after the requirement is identified. Based on an EA, if a DoD Component determines that an EIS is not required, the Component shall prepare a FONSI. If the DoD Component determines that a categorical exclusion exists, neither an EIS nor a FONSI is required.

**Preimplementation Actions.** The DoD Components shall ensure that the NEPA is integrated into the acquisition decisionmaking process and that the NEPA requirements coincide with all major program decision points. Relevant environmental documents, comments, and responses should accompany a proposal through DoD Component reviews to ensure consideration by decisionmakers.

**Public Involvement.** Public involvement is the law. The NEPA states that the public shall participate, to the extent practicable, in the environmental review process. Environmental documents must be made available to the public to ensure that all interested parties can be informed of and comment on proposed actions before decisions are reached. DoD Directive 6050.1 requires the DoD Components to involve environmental agencies, applicants, and the public, to the extent practicable, in preparing EAs. If, as the result of an EA, a FONSI is prepared, the FONSI must be made available to the affected public. When the DoD Component decides to prepare an EIS, the Component is required to publish a notice of intent in the Federal Register. The notice of intent describes the proposed action and possible alternatives, including the proposed range of actions, alternatives, and impacts to be considered in the EIS. The notice of intent also provides the name and address of the DoD Component's point of contact. Information or status reports on EISs and other elements of the NEPA process will be provided to interested persons upon request. For each EIS, a record of decision (ROD) is required. The ROD is a concise public document that provides a record of the Government's decision concerning an EIS; identifies the alternatives considered in making the decision;

specifies the environmentally preferable alternatives; indicates other factors that were considered in the decisionmaking process; and states whether all practicable means were taken to avoid or minimize environmental harm and if not, why not.

**DoD Instruction 5000.2.** DoD Instruction 5000.2 states that DoD will design, develop, test, field, and dispose of Defense systems in compliance with applicable environmental protection laws and regulations, treaties, and agreements. Environmental analysis and planning will begin as early as possible in the acquisition process and will examine the entire life cycle of the program. During the Concept Exploration and Definition phase, the potential environmental effects of each alternative will be assessed. DoD Directive 5000.2 requires potential environmental efforts noted in this initial environmental analysis to be integrated into the assessment of each alternative; however, DoD Instruction 5000.2 is silent on how this is to be accomplished. Since no guidance is provided on how environmental effects are to be assessed during Concept Exploration and Definition, we consider the requirements of the PEA applicable, even though DoD Instruction 5000.2 states that a PEA will begin immediately *after* the Concept Demonstration Approval milestone. We intend to address this inconsistency in policy guidance in our summary report.

The PEA contains a description of the program; alternatives to be studied; potential environmental impacts of each alternative throughout the system's life cycle; potential mitigation of adverse impacts; and the effect of environmental impacts and proposed mitigation on schedule, siting alternatives, and program cost. The PEA will be coordinated and integrated with other program plans and analyses and will be done regardless of the classification of the program. After each succeeding milestone decision point, the PEA will be updated as necessary. The update, called a tier, focuses on the issues for a particular decision point. The PEA should be the summarization at the overall program level of all EAs, EISs, and FONSIIs performed on individual program segments; results in either an EIS or a FONSI for the entire program; and will be summarized in the Integrated Program Summary (IPS), Annex E. The summary will include alternatives considered, potential environmental effects, rationale for concept or design alternative chosen, mitigation measures, and conclusions. The Annex will discuss how environmental impacts and proposed mitigation measures would affect schedules, siting alternatives, and program life-cycle costs.

We consider it highly likely that at least one aspect of a major Defense acquisition program will need an EIS; therefore, we would not expect a FONSI to address the entire program. For those aspects of the program resulting in an EIS, a ROD is required. We consider a ROD necessary at the overall program level if the PEA results in the production of an EIS. Conversely, if a FONSI results, the FONSI would be the public record of the Government position at the overall program level.

The DoD Instruction 5000.2 does not specify who the decision authority is for EISs resulting from a PEA of a major Defense acquisition program. Therefore, we concluded that the milestone decision authority is also the EIS decision authority and will recommend clarification of this policy matter in our summary report on this subject.

## Assessing Environmental Consequences

Even though the V-22 Osprey Program may reenter Engineering and Manufacturing Development, the Navy has not yet assessed and documented environmental impacts or consequences and integrated environmental considerations into its decisionmaking process for the Program.

**Environmental Analyses and Documentation.** The V-22 Osprey Program Office did not have program documentation for the concept studies approval and concept demonstration approval milestones. The Program Office did have documentation for the development approval milestone in April 1986; however, the documentation did not address environmental considerations. Consequently, the Program Office did not have evidence of compliance with the provisions of DoD Directive 6050.1. In preparation for reentry into Engineering and Manufacturing Development, the Program Office had not prepared a PEA and an IPS, Annex E. Therefore, decisionmakers would not be able to consider environmental consequences in the decisionmaking process.

**Integrated Environmental Considerations.** The Program Office could not demonstrate that it had planned to design, develop, test, field, and dispose of the V-22 Osprey system in compliance with applicable environmental protection laws and regulations. Discussion with the Program Office indicated that it had not integrated NEPA into the initial planning stages of the V-22 Osprey Program to ensure that planning and program decisions reflected environmental policies and procedures, which could avoid potential conflicts with environmental laws later in the acquisition, logistics support, and disposal phases of the Program.

## Cause for Not Conducting an Environmental Assessment

The failure of the V-22 Osprey Program management to assess environmental consequences, prepare appropriate documentation, and integrate environmental considerations into its decisionmaking process occurred because the Program Office was not familiar with NEPA requirements and did not employ appropriate management oversight. Discussions with V-22 Osprey Program personnel indicated that they were not aware of applicable environmental regulations and procedures. If the Program reenters Engineering and Manufacturing Development, we believe that compliance with the requirements in DoD Instruction 5000.2 for a PEA is mandatory, even though the Program previously failed to comply with DoD Directive 6050.1.

### Effect of Not Considering the Environment

The Navy's failure to assess environmental consequences of the V-22 Osprey Program does not comply with Federal and DoD regulations and makes it impossible for the Program Office to be assured that it is carrying out its mission in a manner consistent with national environmental policies. In addition, the Program could experience significant additional cost expenditures, such as fines, for noncompliance with environmental laws in the acquisition and logistics support phases and for not properly cleaning up and disposing of resulting hazardous materials. By not ensuring that NEPA is integrated into the acquisition decisionmaking process, major program decisions are being made without due consideration of the consequences to the environment. Furthermore, decisionmakers are not able to make informed program decisions because of the lack of environmental documents, comments, and responses associated with the Program.

### Conclusion

We believe that the V-22 Osprey Program must complete a PEA before reentry into Engineering and Manufacturing Development so that environmental impact, such as the use of hazardous materials in the Program, can be properly considered by decisionmakers in the Office of the Secretary of Defense and to ensure that the Program is in compliance with environmental laws and policies. In particular, we are concerned that the costs associated with environmental compliance will not be adequately considered in life-cycle cost estimates before production starts if the PEA is not completed timely and EISs initiated as necessary. In addition to involvement by the Program Office, the prime contractor needs to be involved with environmental analyses of the Program to ensure thorough and complete preparation of the analyses and associated documentation, including assessing developmental and production processes and cost. Also, we believe that EISs determined necessary by the PEA must be completed before entry into low-rate initial production of the V-22 and submitted for decision to the Under Secretary of Defense for Acquisition.

The procedures outlined in our recommendations for a PEA before reentry in Engineering and Manufacturing Development and completion of required EISs before low-rate initial production are based on the present status of the V-22 Osprey Program and the previous failure to perform environmental analyses. These procedures should not be acceptable for other programs. We consider environmental planning an essential consideration much earlier in a development program, with both PEAs and EISs completed before Engineering and Manufacturing Development.



## **Recommendation, Management Comments, and Audit Response**

**We recommend that the Under Secretary of Defense for Acquisition direct the Navy to:**

- 1. Conduct and document a programmatic environmental analysis of the V-22 Osprey Program for Defense Acquisition Executive approval before reentry into Engineering and Manufacturing Development in accordance with Department of Defense Directive 6050.1, "Environmental Effects in the United States of DoD Actions," July 30, 1979, and Department of Defense Instruction 5000.2, "Defense Acquisition Management Policies and Procedures," February 23, 1991.**
- 2. Provide a summary of the environmental impact statements required as a result of the programmatic environmental analysis to the Defense Acquisition Executive for decision before any low-rate initial production is authorized.**
- 3. Incorporate the results of the environmental analyses and impact statements, including impacts identified and mitigating actions to be taken, into the Integrated Program Summary, life-cycle cost estimates, and other Defense Acquisition Board documentation for review at the low-rate initial production decision in accordance with Department of Defense Instruction 5000.2, "Defense Acquisition Management Policies and Procedures," February 23, 1991.**

**Management Comments.** We received comments to a draft of this report from the Principal Deputy Assistant Secretary of Defense (Production and Logistics) (the Principal Deputy); and the Director, Land Forces Division, Office of the Assistant Secretary of Defense (Program Analysis and Evaluation) (the Director). The complete text of the Principal Deputy's and the Director's comments are in Part IV.

**Principal Deputy Assistant Secretary of Defense (Production and Logistics) Comments.** The Principal Deputy concurred with the finding and suggested that the recommendation also require that the results of environmental analyses and impact statements include impacts identified and mitigating actions to be taken. That inclusion would more clearly state what is expected of the Navy at the next Defense Acquisition Board review.

**Director, Land Forces Division, Office of the Assistant Secretary of Defense (Program Analysis and Evaluation).** The Director concurred with the recommendation and made two additional comments concerning Engineering and Manufacturing Development of the V-22 Osprey Program and the results of environmental analyses and impact statements. The Director indicated that a decision has not been made to continue the Engineering and Manufacturing Development of the V-22 Osprey Program. However, the Defense Acquisition Board held a Milestone 0, Concept Studies Approval, Review of the Medium-

## Environmental Analysis

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Lift Replacement in late FY 1992; the V-22 was one alternative considered for meeting the requirement. Further, the Director noted that DoD should develop general principles for environmental costing, including models and data bases, to incorporate the results of the environmental analyses and impact statements into life-cycle cost estimates.

**Audit Response.** The actions taken by management are responsive to our audit recommendations. The complete text of management comments is in Part IV.

**Principal Deputy Assistant Secretary of Defense (Production and Logistics).** We concur with the Principal Deputy's comments and modified the recommendation to require that the results of environmental analyses and impact statements include impacts identified and mitigating actions to be taken.

**Director, Land Forces Division, Office of the Assistant Secretary of Defense (Program Analysis and Evaluation).** We concur with the Director's comments and revised our report to indicate that DoD has not yet made a decision to continue the Engineering and Manufacturing Development of the V-22 Osprey Program. We also included his comment that the Defense Acquisition Board held a Milestone 0, Concept Studies Approval, Review of the Medium-Lift Replacement in late FY 1992 and the V-22 was one alternative considered for meeting the requirement. We also agree with the Director that DoD should develop general principles for environmental costing, including models and data bases, to incorporate the results of the environmental analyses and impact statements into life-cycle cost estimates. We will expand on the Director's comments to develop general principles for environmental costing in our summary report on this subject.

## **Part III - Additional Information**

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## **Appendix A. Summary of Potential Benefits Resulting From Audit**

<b>Recommendation Reference</b>	<b>Description of Benefit</b>	<b>Amount and/or Type of Benefit</b>
1. - 3.	Internal Control. Will improve Program oversight and compliance with environmental policies.	Nonmonetary.

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## **Appendix B. Activities Visited or Contacted**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition, Washington, DC  
Assistant Secretary of Defense (Production and Logistics), Washington, DC  
Deputy Assistant Secretary of Defense (Environment), Arlington, VA  
Director, Acquisition Policy and Program Integration, Washington, DC  
Director, Tactical Systems, Washington, DC  
Comptroller of the Department of Defense, Washington, DC

### **Department of the Navy**

Assistant Secretary of the Navy (Financial Management), Washington, DC  
Assistant Secretary of the Navy (Research, Development and Acquisition),  
Washington, DC  
Naval Air Systems Command, Arlington, VA  
V-22 Osprey Program Office, Arlington, VA  
Medium-Lift Replacement Program Office, Arlington, VA

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## **Appendix C. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition  
Assistant Secretary of Defense (Production and Logistics)  
Deputy Assistant Secretary of Defense (Environment)  
Director, Acquisition Policy and Program Integration  
Director, Tactical Systems  
Assistant Secretary of Defense (Program Analysis and Evaluation)  
Assistant Secretary of Defense (Public Affairs)  
Comptroller of the Department of Defense

### **Department of the Navy**

Secretary of the Navy  
Commandant of the Marine Corps  
Assistant Secretary of the Navy (Financial Management)  
Assistant Secretary of the Navy (Research, Development and Acquisition)  
Comptroller of the Navy  
Naval Air Systems Command  
V-22 Osprey Program Office  
Headquarters, Naval Audit Service

### **Department of the Air Force**

Air Force Audit Agency

### **Defense Agencies**

Director, Defense Contract Audit Agency  
Director, Defense Intelligence Agency  
Director, Defense Logistics Agency  
Director, Defense Logistics Studies Information Exchange  
Inspector General, National Security Agency

## **Non-DoD Organizations**

Office of Management and Budget  
U.S. Environmental Protection Agency  
U.S. General Accounting Office, National Security and International Affairs Division,  
Technical Information Center

Chairman and Ranking Minority Member of the Following Congressional Committees  
and Subcommittees:

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Operations  
House Subcommittee on Legislation and National Security, Committee on  
Government Operations

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## **Part IV - Management Comments**

**Office of the Assistant Secretary of  
Defense (Production and  
Logistics) Comments**

**Office of the Assistant Secretary of  
Defense (Program Analysis  
and Evaluation) Comments**

# Office of the Assistant Secretary of Defense (Production and Logistics) Comments



THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-8000

FEB 25 1992


MEMORANDUM FOR DOD INSPECTOR GENERAL

SUBJECT: Draft Audit Report on the Review of the V-22 Osprey Program

Thank you for the opportunity to review the subject draft audit report. I concur with your findings; however, I suggest that the second part of the Summary of Recommendations starting on line 5 of page ii be changed to read as follows:

"and incorporate the results of environmental analyses and impact statements, *to include impacts identified and mitigating actions to be taken*, into the Integrated Program Summary . . ." (additions indicated by italics).

This will more clearly state what is expected of the Navy at the next Defense Acquisition Board review as provided for in DoD Manual 5000.2

  
David J. Berteau  
Principal Deputy

# Office of the Assistant Secretary of Defense (Program Analysis and Evaluation) Comments



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE  
PROGRAM ANALYSIS AND EVALUATION  
WASHINGTON, DC 20301-1800



FEB 11 1993

## MEMORANDUM FOR THE OFFICE OF THE ASSISTANT INSPECTOR GENERAL FOR AUDITING

SUBJECT: Draft Audit Report on the Review of the V-22 Osprey Program as a Part of the  
Audit of the Effectiveness of DoD Environmental Consequence Analyses of  
Major Defense Acquisition Programs (Project No. 2AE-0048.01)

I have reviewed the subject draft report and concur with the recommendations that the Navy be required to conduct and document the appropriate environmental analyses before entry into Engineering and Manufacturing Development (EMD) and before any low-rate production is authorized. I would, however, make two comments:

- Contrary to statements in the draft report, a decision has not been made to continue the EMD of the V-22. The Defense Acquisition Board held a Milestone 0 Review of the Marine Corps' Medium Lift Replacement (MLR) in late FY 1992. The V-22 is one alternative that will be considered for meeting this requirement.
- In order to include the results of environmental analyses and impact statements into life-cycle cost estimates, the Department will need to first develop general principles for environmental costing including models and data bases.

Dr. William G. Lese, Jr.  
Director  
Land Forces Division

## **Audit Team Members**

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## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Environmental Consequence Analyses for the V-22 Osprey Program

**B. DATE Report Downloaded From the Internet:** 05/08/99

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):** OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

**F. The foregoing information was compiled and provided by:**  
DTIC-OCA, Initials: \_\_VM\_\_ Preparation Date 05/08/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.